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ABSTRACT

The improvement of student engaged time leads to improvement in instruction. Major steps for improving instruction by improving student engaged time are information collection, comparison of information and identification of strategies, selection and preparation of strategies, and implementation and re-evaluation. This leader's guide covers the topic of selection and preparation of strategies by teaching participants how to: (1) select a strategy; (2) plan the strategy's implementation; and (3) assess the strategy's effectiveness. Instructional materials to be used in this program are included. (CJ)

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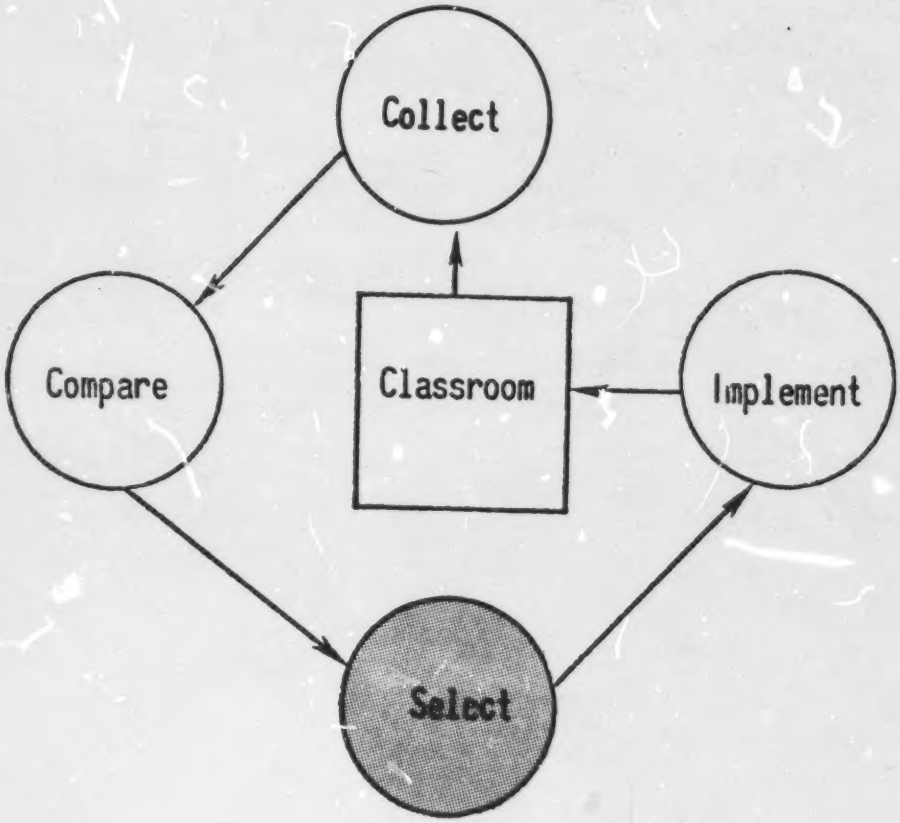
TIME LEADER'S GUIDE

SELECTION AND PREPARATION



Basic Skills Instructional Improvement Program

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Basic Skills Component
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SELECTION AND PREPARATION

Preview

Purpose:

To select a strategy for reaching the student engaged time goal established in the Comparison and Identification Phase, to plan to implement that strategy, and to decide how or when one is satisfied that the strategy has been implemented and is working.

Objectives:

To provide a rationale for and overview of the activities with the Selection and Preparation Phase of the instructional improvement cycle.

To enable participants interested in changing allocated time to select an appropriate strategy to be implemented.

To enable participants interested in changing engagement rate to select an appropriate strategy to be implemented.

To enable participants to describe their selected strategies, make implementation plans, and make monitoring plans.

Expected Outcomes:

Selection of an appropriate strategy for reaching the student engaged time goal; a description of that strategy; plans for the strategy's implementation; plans for monitoring the implementation.

Time:

About 3-3½ hours of meeting time is needed for an in-depth sequential presentation of all topics. Activities for teachers interested in changing only allocated time may be completed in 2-2½ hours, and those for teachers interested in changing engagement rate only may be completed in 2-2½ hours. This time is allocated by topics as follows:

A. Agenda: Rationale, activities, and outcomes (5 minutes)

B. Pullouts (10-20 minutes)

C. Allocated time: Discussion of strategies and selection (50 minutes)

D. Engagement Rate: Discussion of strategies and selection (60 minutes)

E. Preparation of an implementation and monitoring plan (60-80 minutes)

The time needed to complete the starred minimal activities is about 2½-3 hours (total) or 1½-2 hours (allocated time group only or engagement rate group only).

Materials:

Completed Engagement Rate forms for each classroom

Classroom schedules

Agenda

Major Activities Chart

Handouts: 3H6-3H10, 3H12-3H14, 3H16-3H19

Transparencies: 3T1-3T5, 3T11, 3T15

Calculators

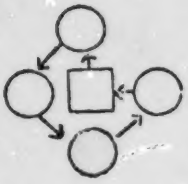
Overhead projector and screen

Resource Guide from Building Leader's Guide

Follow-up:

Implement and monitor the selected strategies in each classroom, according to the plans made in this meeting.

Make arrangements for the next meeting to be held after most teachers have had enough time to implement and monitor their strategies. Be sure to bring a calendar to the next meeting.



SELECTION AND PREPARATION

AGENDA

A. REVIEW OF AGENDA

- Rationale, activities, and outcomes

B. PULLOUTS

- Analyzing effects of pullouts on time

C. ALLOCATED TIME[1]

- Strategies from research
- Suggestions from other participants
- Brainstorming

D. ENGAGEMENT RATE[2]

- Looking at classroom data on unengaged behaviors
- Strategies from research
- Suggestions from other participants
- Brainstorming

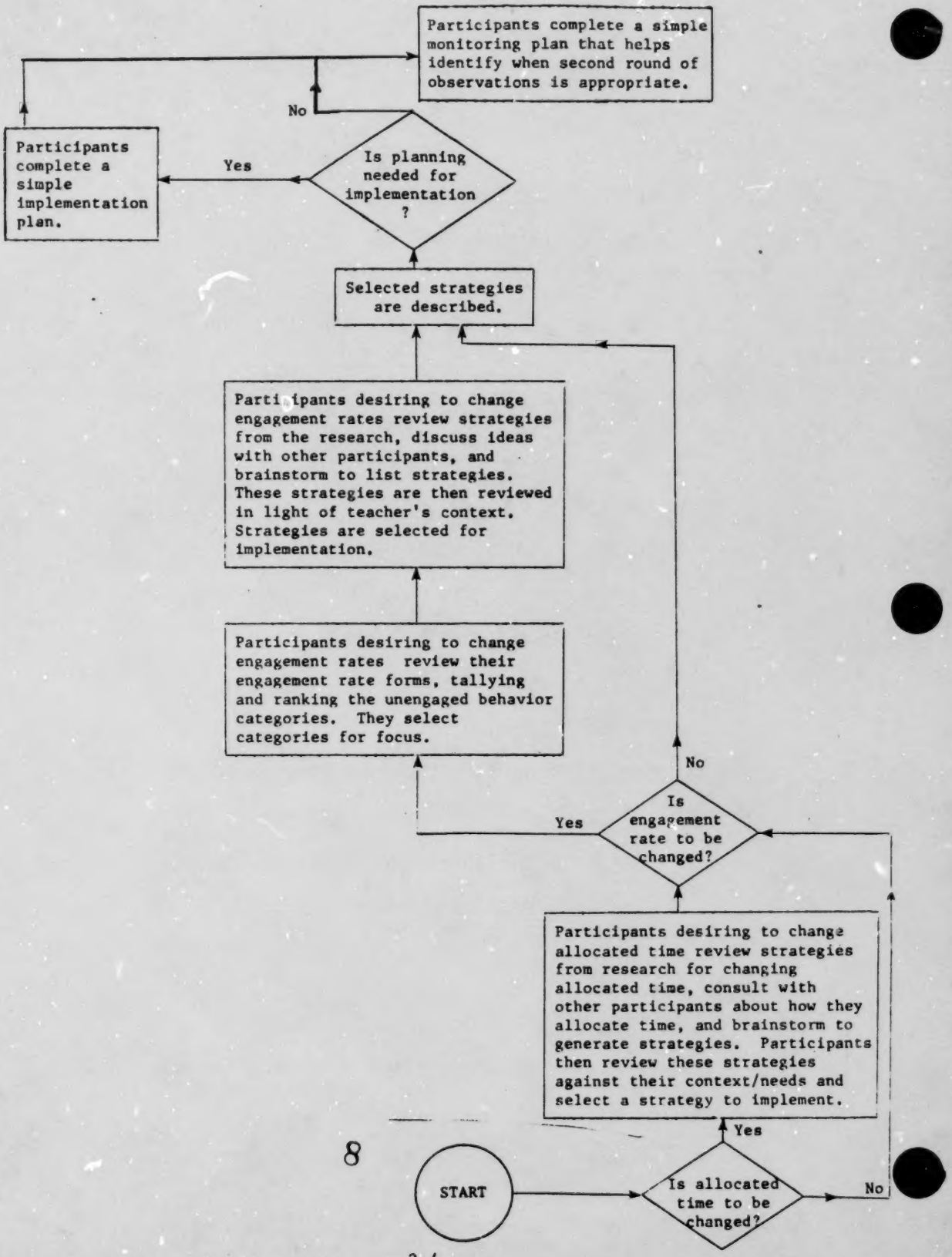
E. PREPARATION OF AN IMPLEMENTATION AND MONITORING PLAN

- Describing the selected strategy
- Using the Implementation Planning Guide
- Developing a monitoring plan

[1] Participants interested in changing engagement rate only may wish to skip this topic.

[2] Participants interested in changing allocated time only may wish to skip this topic.

MAJOR ACTIVITIES FOR SELECTION AND PREPARATION


START
Is allocated time to be changed?
Yes
No
Participants desiring to change allocated time review strategies from research for changing allocated time, consult with other participants about how they allocate time, and brainstorm to generate strategies. Participants then review these strategies against their context/needs and select a strategy to implement.
Is engagement rate to be changed?
No
Yes
Participants desiring to change engagement rates review their engagement rate forms, tallying and ranking the unengaged behavior categories. They select categories for focus.
Participants desiring to change engagement rates review strategies from the research, discuss ideas with other participants, and brainstorm to list strategies. These strategies are then reviewed in light of teacher's context. Strategies are selected for implementation.
Selected strategies are described.
Is planning needed for implementation ?
Yes
No
Participants complete a simple implementation plan.
Participants complete a simple monitoring plan that helps identify when second round of observations is appropriate.

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Glossary for Selection and Preparation

Brainstorming	Group activity in which participants generate ideas without critique or evaluation by others.
Implementation Planning Guide	Form for planning and/or organizing implementation of an improvement strategy. This record helps participants identify decisions, needed materials and resources, possible sources of materials, and a tentative timeline.
Monitoring an Implementation	Observing a strategy that has been implemented to see if it is in place. This information helps a participant decide when a second round of observations is appropriate.
Monitoring Plan	Plan for monitoring an implementation. This plan includes what data will be collected, how it will be collected, who will collect it, and when it will be collected.
Resource Guide	Listing of national, regional, and/or local resources included in the Building Leader's Guide.

Materials for Selection and Preparation

The following materials are included in this section:

- ✱ 3T1 Now What Do I do With My Data?
- ✱ 3T2 Selecting a Path
- ✱ 3T3 Showing the Logical Connection
- ✱ 3T4 Planning the Trip
- ✱ 3T5 Taking a Sighting
- ✱ 3H6 (a-c) Analyzing Pullouts
- ✱ 3H7 (a-d) Allocated Time Strategies and Brainstorming
- ✱ 3H8 Ranking of Unengaged Categories
- ✱ 3H9 (a-n) Engagement Rate Strategies
- ✱ 3H10 Things to Think About
- ✱ 3T11 Strategy Description
- ✱ 3H12 Describing Your Strategy
- ✱ 3H13 (a-d) Peter Demetrios's Plans
- ✱ 3H14 Implementation Planning Guide
- ✱ 3T15 Considerations in Planning
- ✱ 3H16 Monitoring Plan
- ✱ 3H17 (a-c) Maria Malenkoi's Plans for Increasing Engagement Rate--Management/Transition
- ✱ 3H18 (a-c) Tad Tallchief's Plans for Increasing Engagement Rate--Unoccupied/Observing
- ✱ 3H19 (a-b) Juanita Mahler's Plans for Increasing Engagement Rate--Unoccupied/Observing

✱--Minimal activity for all participants

Notes for Selection and Preparation

The following notes are included in this section:

D.3. Engagement Rate Strategies

★A. Agenda: Rationale, activities, and outcomes (5 minutes)

Rationale: Participants now have established a goal for student engaged time, engagement rate, and allocated time. However, having a goal is not synonymous with knowing how to reach it. Selecting and preparing a strategy to reach the goal are the focus of this phase.

Materials	Strategy
3T1--Now What Do I Do With My Data? 3T2--Selecting a Path	Briefly review events in the Comparison phase. Provide a rationale for the Selection and Preparation Phase.
--Agenda 3T3--Showing the Logical Connection 3T4--Planning the Trip 3T5--Taking a Sighting	Outline major activities in this phase. Present the reasons for major activities--selecting a strategy, describing a strategy, planning to implement the strategy. Address questions/concerns about the activities planned for the session. Review by stating the expected outcomes and showing how those outcomes lead to the final phase, implementation.

1. Rationale
   a. Participants collected data (3T1) and set a goal for student engaged time
   b. The challenge now is how to reach the goal
   c. Many paths exist
      (1) There are many different strategies a teacher might select
      (2) Each teacher likely to select a unique one--dependent on his/her own conditions
   d. Amount of planning and preparation depend on the complexity of strategy
2. Purpose
   a. Select a strategy for reaching goal set in Comparison Phase
   b. Plan to implement that strategy, and decide how or when one is satisfied that the strategy is implemented and working

3. Proposed agenda

   a. Selecting a strategy (3T2)

      (1) Many strategies possible

         (a) Change allocated time

         (b) Change engagement rate by using strategies related to:

            (i) Monitoring

            (ii) Feedback

            (iii) Motivation

            (iv) Classroom rules

      (2) Selection of most promising strategy for your context and abilities is important

      (3) Suggestions from research, from other participants (including observers), and from brainstorming

      (4) Resource Guide—national, regional, and/or local resources listed in Building Leader's Guide

         (a) Help in locating strategies

         (b) Help in implementing strategies

      (5) Suggestions for involvement of other levels in Building Leader's Guide

   b. Describing a strategy

      (1) Need to ensure a logical connection between strategy and goal--increases chances of success

      (2) Example--selected engagement rate strategy should relate to specific student behaviors (3T3)

   c. Planning to implement the strategy (3T4)

      (1) Change is almost always difficult or disruptive

      (2) Planning before acting helps to smooth change and increase probability of success

      (3) Amount of necessary planning depends on complexity of change

   d. Monitoring the implementation (3T5)

      (1) Determine when strategy is in place--is the change happening as planned

(2) A second round of data collection on student engaged time is appropriate if there is reason to believe that student engaged time has changed

(a) Strategy in place

(i) Student engaged time possibly changed as hoped

(ii) Reading of student engaged time seems sensible

(b) Strategy not in place

(i) No reason to believe student engaged time changed

(ii) Reading of student engaged time probably not appropriate yet

4. Expected outcomes--participants will have:

a. Selected a strategy felt appropriate to their context/ circumstances

b. Planned to implement the strategy and monitor the implementation

5. Next steps

a. Implement the strategy in the classroom

b. Monitor the strategy's implementation

c. Review and discuss implementation

d. Determine when a second round of data collection will be appropriate

e. Plan for periodic data collection of student engaged time

MATERIALS

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NOW WHAT DO I DO WITH MY DATA ?

So what ?

SUMMARY SHEET FOR 009			
Allocated Time	Engagement Rate	Student Engaged Time	Average Student Engaged Time
READING			
170	80%	136	
150	85%	128	132
180	75%	135	133
MATH			
45	70%	32	
40	75%	30	31
40	85%	34	32

SUMMARY SHEET FOR 008			
Allocated Time	Engagement Rate	Student Engaged Time	Average Student Engaged Time
READING			
110	90%	99	
120	85%	102	101
112	82%	92	98
MATH			
60	85%	51	
45	90%	41	46
70	84%	59	50

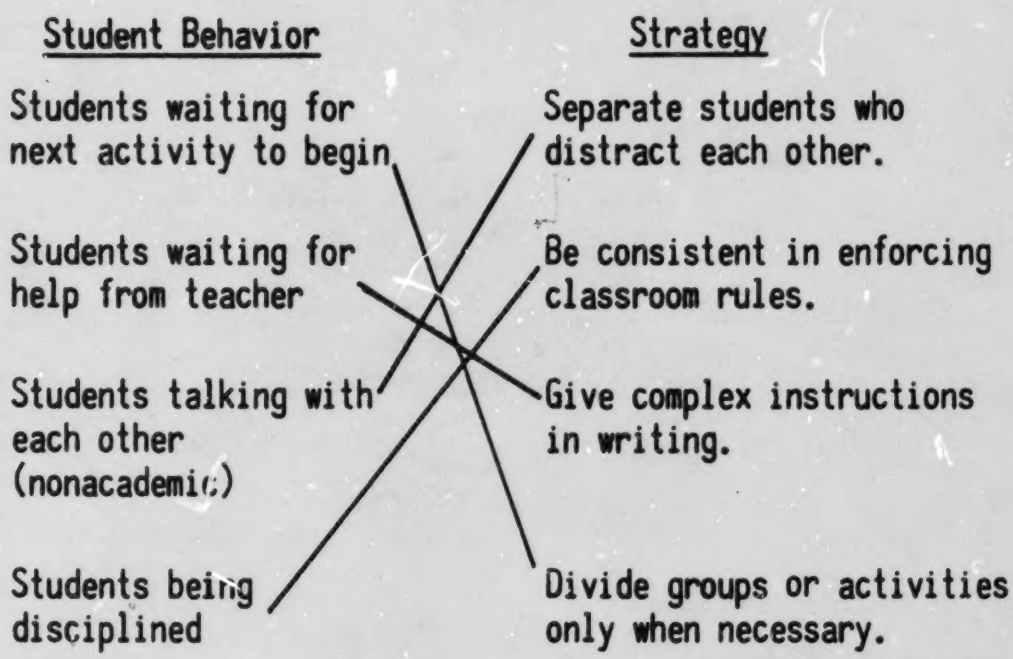
What kind of student achievement may I expect ?

SELECTING A PATH

ALLOCATED TIME

ENGAGEMENT RATE
- Monitoring
- Feedback
- Motivation
- Classroom Rules

SHOWING THE LOGICAL CONNECTION


Student Behavior
Strategy
Students waiting for next activity to begin
Students waiting for help from teacher
Students talking with each other (nonacademic)
Students being disciplined
Separate students who distract each other.
Be consistent in enforcing classroom rules.
Give complex instructions in writing.
Divide groups or activities only when necessary.

PLANNING THE TRIP

IMPLEMENTATION PLANNING GUIDE

Steps/plans/decisions

Decide when to have math drill.
Talk with principal about schedule change.
Introduce activity to students.

Materials/resources	Source
Math drill materials	Math coordinator School storeroom

Timeline of events

2/5 Revise schedule; talk with principal
2/8 See district math coordinator
2/12 Plan activities for first week
2/19 Begin new schedule

TAKING A SIGHTING

Has allocated time changed?

ALLOCATED TIME LOG

Have I given students assignments within the the first two minutes of each period?

Monday	- Yes
Tuesday	- Yes
Wednesday	- No
Thursday	- Yes
Friday	- No

B. Pullouts (10-20 minutes)

Rationale. Student engaged time may be adversely affected by pullouts. Pullouts were not considered on the Allocated Time Log, but participants may wish to analyze their effects at this point.

Materials	Strategy
3H6--Analyzing Pullouts (a-c)	Have participants examine the number of pullouts from their classrooms during observations. If desired, discuss ways to minimize the number and frequency of pullouts. Participants may also wish to track individual students to determine if they are receiving instruction in all subject areas. Determine how many participants are interested in changing allocated time only, how many are interested in changing engagement rate only, and how many are interested in changing both allocated time and engagement rate. Unless there are only a few teachers, divide into two groups, one for allocated time (Topic C) and one for engagement rate (Topic D). If only a few teachers are interested in both topics, these teachers can work first with the engagement rate group and then join the allocated time group later or complete those activities independently. If several teachers are interested in both topics, the whole group can do the activities for allocated time first (uninterested teachers may take a break or participate in brainstorming) and then complete the engagement rate activities.

Alternate Strategy

If there is only one leader, that person can get both groups (allocated time and engagement rate) started by giving a general overview (Topics C.1 and D.1). Then the leader can work with the engagement rate group.

1. Rationale for looking at pullouts--determine if student engaged time is greatly affected by pullouts (1 minute)
   a. Pullouts not considered on Allocated Time Log
   b. If many pullouts, student engaged time lower than calculated value
   c. So need to consider ways to minimize effects on student engaged time
2. Procedures (3H6a) (5-10 minutes)
   a. Record largest number of students assigned to pullouts during each day of observation
   b. Decide if number of pullouts is typical
   c. Look at number and frequency of pullouts
   d. Discussion of ways to minimize number and frequency of pullouts (3H6b)
3. Tracking individual students (3H6c) (4-9 minutes)
   a. Students may not be receiving instruction in all subjects
      (1) Example--student pulled out at various times so that he/she never studies math
   b. Record all pullouts for week
   c. Compare to class schedule
   d. Look at patterns
4. Dividing into groups
   a. Teachers have tentative goals for allocated time and engagement rate
   b. Groups based on which area teachers are interested in changing
      (1) Allocated time
      (2) Engagement rate
      (3) Both allocated time and engagement rate
         (a) Only a few teachers
            (i) Work with engagement rate first
            (ii) Join allocated time group later or do independently
         (b) Several teachers
            (i) Whole group does allocated time first--uninterested teachers take break or join in brainstorming
            (ii) Whole group does engagement rate next

MATERIALS

ANALYZING PULLOUTS

What was the largest number for students assigned to pullouts during observations?

Subject	Total Number of Pullouts Assigned		
	Day 1	Day 2	Day 3
Reading			
Language Arts			
Math			

Were these observations typical of reading/language arts and math periods in terms of the number of students pulled out?

Is the number of pullouts regularly more than one-fifth of the class?

Does the frequency of pullouts disrupt basic skills instruction?

Can the adverse effects of pullouts on student engaged time be reduced??

ANALYZING PULLOUTS

Strategies Used by Schools

The following strategies have been used by schools to provide more student engaged time in reading/language arts and mathematics.

- Combine time periods for pullouts. For example, instead of having remedial classes five days a week for 30 minutes each day, have them three times a week for 45 minutes.

- Where possible, have all students in the classroom going to pullouts go at the same time. This allows each teacher to work with the same group of pupils for an uninterrupted period of time.

- Have compensatory education teachers go into the classroom to teach, thereby eliminating any pupil time spent moving between classrooms.

- Schedule pullouts so that students do not miss instruction in a subject area. For example, have students pulled out for remedial reading during reading instruction rather than during math.

ANAYLZING PULLOUTS

TRACKING INDIVIDUAL STUDENTS

Even in situations where pullouts are relatively rare, some students may not be spending adequate time in basic skills. Teachers may wish to complete the table below to trace individual students throughout the week.

Student	Monday	Tuesday	Wednesday	Thursday	Friday

- Write the name of each pullout student in the first column.
- Record the time(s) (e.g., 9:30 - 10:00) that each student is pulled out each day; use more than one line, if needed.
- Look at patterns throughout the week. Does a student miss a significant portion of the period for one subject and not receive instruction in this subject elsewhere?

★C. Allocated time: Discussion of strategies and selection (50 minutes)

Rationale: Participants interested in changing allocated time need to look at and discuss strategies from related research. The group may wish to generate additional strategies more pertinent to their own situations by examining suggestions from other participants and by brainstorming. After all the strategies have been discussed, participants will select strategies to be implemented.

Materials	Strategy
	Review the activities of this topic with participants who have decided to change allocated time.
3H7--Allocated Time (a-d)Strategies and Brainstorming --Classroom Schedules	Form small groups of 3-8 interested participants to examine related research references on allocated time. Discuss each strategy individually. If additional strategies are needed, the group may wish to look at suggestions from other participants and generate strategies by brainstorming. Have participants circle potential strategies on 3H6. Have group members bring their classroom schedules with them in order to decide where to make changes. Review considerations for selecting a strategy before participants decide which strategy they will choose to implement. Have participants select a strategy from either the research or the list generated in the brainstorming activity. Those selecting generated strategies may find it helpful to compare their strategy to those from the research.

Alternative Strategies

1. Participants who are not interested in changing allocated time may skip this topic and go directly to the activities on engagement rate (Topic D).
2. If there are a small number of participants, meet in one large group.

1. Overview of activities--small groups will: (3H7a)
   a. Review suggestions from related research
   b. Discuss suggestions from other participants and complete brainstorming activity
   c. Examine things to think about before selecting a strategy to be implemented in classroom, school, or district
   d. Select a strategy
2. Allocated time strategies
   a. Strategies to increase allocated time from research--limited (3H7b)
   b. Strategies to decrease allocated time--based on common sense (3H7c)
   c. Strategies used by schools (3H7d)
   d. Brainstorming
      (1) Including suggestions from other participants and/observers
      (2) Guidelines
         (a) Any strategy can be suggested, whether it is possible, impossible, crazy, or mundane
         (b) All strategies should be written down
         (c) No critique or evaluation of the strategies is allowed
         (d) Brainstorming can continue for as long as it seems useful
         (e) Adding to someone else's idea is encouraged
3. Selecting a strategy
   a. Identifying 3-10 tentative strategies by circling them (3H7)
   b. Looking at classroom schedules
      (1) Determine in what subject areas times could be increased or decreased
      (2) Look at schedules in light of identified strategies
   c. Considerations in selecting a strategy (3H7e)
      (1) Think about relationship of strategy and goal
      (2) Think about what is needed--materials, equipment
      (3) Think about what new schedule would look like
      (4) Think about whether change is appropriate given your classroom, your students, your school policies, etc.

(5) Think about relative importance of subject area

(6) Think about other people who need to be involved--e.g., would someone else's schedule be altered?

(7) Think about making simple changes before making complicated ones--however, simple changes may not always be possible

(8) Think about whether the amount of data available warrants the change

(a) You may not want to make an expensive change on the basis of one round of observations for one teacher

(b) But if data from several teachers or several observations indicate an expensive change, you may want to make that change

d. Selection of a strategy

Materials

In addition to the materials included here, teachers will also need:

Classroom Schedules

ALLOCATED TIME STRATEGIES AND BRAINSTORMING

This mini-package consists of several handouts. These handouts will facilitate looking at related references from research on allocated time strategies and brainstorming additional strategies. The first handout (3H6b) contains strategies from related research to increase allocated time, as well as space for you to write down suggestions from other participants and ideas generated from the brainstorming activity. The next page of this handout (3H6c) contains strategies to decrease allocated time and space to write additional suggested and generated strategies.

Each group may wish to complete the following activities:

- Review strategies from the research.
- Brainstorm additional ideas using the guidelines shown below.
- Have each teacher identify some (3-10) potential strategies for use in his/her classroom by circling them.

Before actually selecting a strategy, there are some things each individual may need to think about. These are listed on 3H7e.

Guidelines for Brainstorming

1. Any strategy can be suggested.
2. Write down all strategies.
3. No critique or evaluation of strategies is allowed.
4. Continue for as long as it is useful.
5. Add to any idea listed.

Strategies to Increase Allocated Time

- Keep a log of how time is actually spent in each subject area each day. Use this information to try to increase the time available for reading and/or mathematics.
  Research reference: Berliner, 1978

- Spend less time on nonacademic subjects, such as music, play, art, drama, and physical education.
  Research reference: Medley, 1977

Strategies Generated from Brainstorming

Strategies to Decrease Allocated Time

- If allocated time for math is too high, then allocated time for reading may be too low. Spend more time on reading.
- Spend more time on other academic subjects such as social studies or science.
- Spend more time on nonacademic activities such as games, music, art, or dancing.

Note: Since most major studies have assumed that process-product relationships are linear, the relationship of teaching strategies to a decrease in student engaged time has not been investigated. The strategies described above follow logically from the positive relationship between allocated time and student engaged time found in several studies (Medley, 1977).

Strategies Generated from Brainstorming

Strategies to Increase Allocated Time

Ideas from the Schools

The following strategies for increasing allocated time were suggested by teachers involved in basic skills instructional improvement programs.

- Provide additional reading/language arts and/or math instruction either in the regular classroom or in other classrooms (e.g., Title I, remedial reading).
- Schedule blocks of time school-wide for reading/language arts and math instruction.
- Reduce the time spent moving between classrooms by scheduling "special" subjects for longer time periods on fewer days. For example, instead of having art three times a week for 30 minutes, schedule it twice a week for 45 minutes.
- Schedule pullouts so that students from the same classroom are pulled out at the same time.
- Add sustained silent reading and/or math drill activities in the afternoon.
- Add a short math drill or problem-solving period to morning activities.
- Integrate art with reading/language art by having students illustrate stories they have read or written.
- Teach basic skills topics as part of another subject. For example, teach measurement in science or reading graphs in social studies.
- Use science or social studies materials to teach reading/language arts.
- Watch educational television programs in basic skills areas in addition to regular instruction.
- Shorten opening exercises.
- Shorten or eliminate recess time.
- Stick to the schedule for recess more closely.
- Instead of having a ten or fifteen minute bathroom break, let students go to the bathroom or get a drink of water individually during instructional periods.

THINGS TO THINK ABOUT IN MAKING A SELECTION

Considerations in making a strategy selection are listed in the form of questions below; you may wish to add some additional questions in the blank spaces. Answer each question for each potential strategy and use these answers to help you select a strategy. In general, the answers to questions 1, 3, 4, and 7 should probably be "yes" for the selected strategy. Write the selected strategy at the bottom of the page.

1. Is the strategy logically related to your goal?
2. Are additional materials or equipment needed?
3. Would your new schedule be feasible?
4. Is the change appropriate for you and your students?
5. Would others be affected?
6. Is this change the simplest one you can make?
7. Does the amount of data available warrant the change?
8.

Selected strategy _____

_____

_____

_____

_____

★D. Engagement rate: Discussion of strategies and selection (60 minutes)

Rationale: Participants interested in changing engagement rate need to look at and discuss strategies from related research. The group may wish to generate additional strategies more pertinent to their own situations by examining suggestions from other participants and by brainstorming. After all the strategies have been discussed, participants will select strategies to be implemented.

Materials	Strategy
--Completed Engagement Rate Forms --Calculators 3H8--Ranking of Unengaged Categories	Review the activities of this topic with participants. Have participants who have decided to change engagement rate rank order unengaged categories from high (1) to low (5) to find out which category needs to be the focus of the change. Form small groups of 3-8 persons who have identified the same unengaged category for focus.
3H9--Engagement Rate (a-n)Strategies	Have each small group examine related research references in a specific category (see Note D.3). Discuss each strategy individually. If additional strategies are needed, the group may wish to look at suggestions from other participants and generate strategies by brainstorming. Teachers may also find it helpful to talk with the persons who observed in their classrooms. Have teachers circle potential stragegies.
3H10--Things to Think About	Review considerations for selecting a strategy before participants decide which strategy they will choose to implement. Teachers may choose a strategy from the research or from the list generated in the brainstorming activity. Those selecting generated strategies may wish to compare their selected strategy to those from the research.

Alternative Strategies

1. Instead of dividing into five small groups, conduct the session with one large group.

2. Use the Resource Guide included in the Building Leader's Guide as an additional resource.

1. Overview of activities--small groups will:
   a. Review suggestions from related research
   b. Discuss suggestions from other participants and complete brainstorming activity
   c. Examine things to think about before selecting a strategy to be implemented in classroom, school, or district
   d. Select a strategy
2. Ranking of unengaged categories (3H8)
   a. Participants look at data from Engagement Rate Forms across all observations
   b. Categories ranked from high (1) to low (5) based on totals

†3. Engagement rate strategies (3H9)
   a. General findings from research
      (1) Expectations--state expectations clearly for both academic work and behavior
      (2) Directions--clear and specific directions
      (3) Transitions--plan for changes in activities; have materials ready
      (4) Physical environment--structure to facilitate learning
      (5) Classroom management--establish clear and consistent rules
      (6) Student work habits--foster good study habits
      (7) Pace lesson briskly
      (8) Feedback--give feedback on both academic work and behavior
      (9) Teacher/student interactions--increase interactions by such means as doing more group work or asking more questions
      (10) Individual differences--provide alternative assignments; make sure the difficulty of assignments is appropriate; provide for prerequisite learning
      (11) Monitoring--move around room; check work; hold students accountable for academic work and behavior
      (12) Review of previous work

b. Strategies by categories

(1) Management/transition (3H9b-e)

(a) Strategies listed under student behaviors they affect

(i) Distributing, setting up, or gathering equipment, supplies, materials, or furniture

(ii) Listening to nonacademic directions

(iii) Waiting for next activity to begin

(iv) Waiting for teacher's help

(b) Decide which behaviors occur in classroom and look at listed strategies

(2) Socializing (3H9f-g)

(a) Only a few strategies listed

(b) See also discipline and/or unoccupied/observing categories

(3) Discipline (3H9h-i)

(a) Only a few general strategies

(b) Decide why students are coded in this category

(i) Do students not understand what is expected of them?

(ii) Do students not receive feedback on their behavior?

(iii) Do students not follow classroom rules?

(c) Look at strategies relevant to expectations, feedback, and/or classroom rules

(4) Unoccupied/observing (3H9j-m)

(a) Strategies listed under student behaviors they affect

(i) Sitting or standing alone, wandering about with no apparent purpose or goal, playing with materials

- Decide why students are coded in this category
  - Are students not motivated because they are not receiving feedback on their academic work?
  - Are students not involved in academic interactions?
  - Are instructional conditions not appropriate for students?
  - Are students not being motivated?
- Look at relevant strategies

(ii) Watching other people or unassigned activities

(5) Out of room--strategies based on common sense and teachers' suggestions

c. Brainstorming

(1) Including suggestions from other participants and/or observers

(2) Guidelines

(a) Any strategy can be suggested

(b) All strategies should be written down

(c) No critique or evaluation of the strategies is allowed

(d) Brainstorming can continue for as long as it seems useful

(e) Adding to someone else's idea is encouraged

4. Selecting a strategy

a. Identifying 3-10 potential strategies by circling them (3H9)

b. Considerations in selecting a strategy (3H10)

(1) Think about relationship of strategy and goal

(2) Think about what is needed--materials, equipment

(3) Think about your teaching style

(4) Think about whether change is appropriate given your classroom, your students, your school policy, etc.

(5) Think about relative importance of subject area

(6) Think about other people who need to be involved--e.g., would someone else's schedule be altered?

(7) Think about making simple changes before making more complicated ones--however, simple changes may not always be possible

(8) Think about whether the amount of data available warrants the change

(a) You may not want to make an expensive change on the basis of one round of observations for one teacher

(b) But if data from several teachers or several observations indicate an expensive change, you may want to make that change

c. Selection of a strategy

Materials

In addition to the materials included here, teachers will also need:

Completed Engagement Rate Forms

RANKING OF UNENGAGED CATEGORIES

Total the unengaged behaviors in each category using data from your Engagement Rate Forms completed in information collection. Add across the columns to find a total for all the days you were observed and place that number in the "Total" column. Then rank categories from high (1) to low (5) in each subject area to see which category needs to be the focus of change (i.e., put #1 next to category that has highest total, a #2 beside the next highest and so on).

	Category	Total from First Day Observation	Total from Second Day Observation	Total from Third Day Observation	Total	Rank Categories
Reading/ Language Arts	Management/ Transition					
	Socializing					
	Discipline					
	Unoccupied/ Observing					
	Out of Room					
Math	Management/ Transition					
	Socializing					
	Discipline					
	Unoccupied/ Observing					
	Out of Room					

ENGAGEMENT RATE STRATEGIES

This mini-package consists of several handouts. These handouts will facilitate looking at related research references on engagement rate strategies and brainstorming additional strategies. Focus on the category you wish to change based on your rankings. List suggestions from participants and strategies generated from brainstorming on the page.

Each group may wish to complete the following activities:

- Review strategies from the research.
- Brainstorm additional ideas using the guidelines shown below.
- Have each teacher identify some (3-10) potential strategies for use in his/her classroom by circling them.

Before actually selecting a strategy, there are some things each individual may need to think about. These are listed on 3H10.

Guidelines for Brainstorming

1. Any strategy can be suggested.
2. Write down all strategies.
3. No critique or evaluation of strategies is allowed.
4. Continue for as long as it is useful.
5. Add to any idea listed.

9/3/80

ENGAGEMENT RATE STRATEGIES--MANAGEMENT/TRANSITION

Distributing, setting up, or gathering equipment, supplies, materials, or furniture

- Have materials and supplies ready in advance of activities.[1]
- Use more routines and procedures to handle daily business.[1]
- Have regular procedures for turning in completed work and noting student progress.[1]
- Teach students the skills of "going to school"--following instructions, finding problems in the book, how to use programmed materials.[1]

- Provide clear starts and stops for activities.[1]
- Alert students to upcoming transitions.[1,2]
- Reduce the time spent in moving from one activity to another by planning specifically for changing activities or by establishing clear and consistent rules for these movements.[1,3]

Listening to nonacademic directions

- Space directions for two similar activities so that they are not confusing, rather than present them simultaneously.[1]

- Sometimes student' looking in their book rather than at the teacher during explanations of directions may lead to confusion. In such cases, have students keep their books closed until the explanation is finished.[1]
- Give complex instructions in writing.[1]
- Increase the amount of teacher-student interaction on academic matters.

[1]Anderson, Evertson, & Emmer, 1979

[2]Arlin, 1979

[3]BTES Phase III-B (Fisher, et al., 1978)

Waiting for next activity to begin

- Reduce the time during which students have no available or assigned activity. These times may occur, for example, when students return from lunch or recess--students may take their seats but must wait for the teacher to begin the class. This time can be reduced by providing assignments at the beginning of the period or by giving students ongoing assignments.[2]

- Check to see that tasks are not too easy for students.[2]

- Minimize the time spent in organizational activities and in waiting for other students by pacing the lesson. Brisk pacing or momentum lends purposefulness to instruction.[2]

- Change classroom management rules. For example, the engagement rate in reading may be low because children working on science constantly interrupt the reading groups. Establishing a rule that no one is to interrupt the reading groups may decrease the interruptions and thus increase the engagement rate.[3]

- Divide activities or groups only when necessary. For example, if there are seven students in a reading group, have them all go to the reading area at once rather than calling each one individually to that area.[4]

- Help slow students learn to use the clock to pace their work so that the class is not always waiting on the same students to finish. Have students who do not finish in class complete their work after school or during free time.[1]

[1]Anderson, Evertson, & Emmer, 1979

[2]BTES Phase III-B (Fisher, et al., 1978)

[3]Filby, 1978

[4]Kounin, 1977

Waiting for teacher's help

- In order to reduce the time children spend waiting for help, give students alternate assignments to complete when help is not immediately available. You may also assign a peer tutor, give each student a sign to raise for help, or use a sign-up sheet or the board for students to indicate that they need assistance.[1,2]
- Increase the clarity and emphasis with which expectations are stated.[2]
- Check to see that tasks are not too hard for students.[2]
- In math classes, provide more structure by giving specific directions on what to do, explaining concepts and skills fully, and stating the goals of instruction.[2]

- Spend 50-75 percent of math class time on meaningful developmental activities and 25-50 percent on drill and practice. Developmental activities include teacher demonstrations, teacher explanations, group discussions, work with namipulative materials, and laboratory activities. Individual pupil tasks such as assignments in textbooks, kits, dittos, or tapes are "drill and practice."[3,4]

[1]Anderson, Evertson, & Emmer, 1979

[2]BTES Phase III-B (Fisher, et al., 1978)

[3]Callahan & Glennon, 1975

[4]Good & Grouws, 1977

Generated Strategies--Management/Transition

ENGAGEMENT RATE STRATEGIES--SOCIALIZING

- Separate students who distract each other.[2]
- Devote more instructional time to group lessons.[3]
- Increase teacher-student academic interactions. Ask students more questions.[3,4]
- During recitation, keep students "on their toes."[5]
- Move around the room regularly and systematically.[1,3,5,6]

See also the strategies suggested for the Discipline and/or Unoccupied/ Observing categories.

[1]Anderson, Evertson, & Emmer, 1979

[2]Berliner, 1978

[3]BTES Phase III-B (Fisher, et al., 1978)

[4]Good & Grouws, 1979

[5]Kounin, 1977

[6]McKenzie, 1979

Generated Strategies--Socializing

ENGAGEMENT RATE STRATEGIES--DISCIPLINE

Expectations

- Let students know which behaviors are desired and which will not be tolerated. Expectations should be clearly stated in behavioral terms. Teach them the skills of good behavior.[1]

Feedback

- Give students specific feedback (both positive and negative) specifying what the student should be doing and/or what was undesirable about the misbehavior.[1]
- Particularly for students of low socioeconomic status, have individual conferences with misbehaving students.[4]
- Use positive methods such as praise to promote good behavior. Reminders to students to get back to work do not seem effective.[3]

Classroom Rules

- Set up a contracting system to manage student behavior.[2]
- Use behavioral modification techniques.[2]
- Indicate through your behavior that you know precisely what students are doing--that "you have eyes in the back of your head." Be sure that reprimands are directed toward the specific student at the right time. Know what is going on in the classroom.[5]
- Be consistent in holding students accountable for behavior and in enforcing classroom rules.[1,3]

[1] Anderson, Evertson, & Emmer, 1979

[2] Berliner, 1978

[3] BTES Phase III-B (Fisher, et al., 1978)

[4] Evertson, 1975

[5] Kounin, 1977

Generated Strategies--Discipline

ENGAGEMENT RATE STRATEGIES--UNOCCUPIED/OBSERVING

Sitting or standing alone, wandering about with no evident purpose or goal, or playing with materials

Feedback

?

- Give students more frequent and systematic feedback as to whether their answers are right or wrong, perhaps by using mailboxes for communication or by setting aside the first 15 minutes of each day for this purpose. Giving feedback is especially important for reading.[1,2]

- Project a positive attitude about academic work. Display work done well.[1]

?

- Provide cues to let students know how they are doing and try to interest students directly. Give students positive indications of progress by building explicitly on previous work, by pointing out improvement, and by bringing in enriching and challenging activities. Give students negative feedback by having them repeat units or tasks. Interest can be stimulated by using a variety of topics, props, locations, and activities, and by varying the difficulty of tasks, the arrangement of groups, and the degree of responsibility given to students.[1,4]

- Let students know why engaged behaviors are important.[1]

- Communicate high expectations for all students. In classes of low socioeconomic status, this may be accomplished through the use of praise and encouragement. In classes of high socioeconomic status, being more critically demanding and using more symbolic rewards such as stars or smiling faces may be more effective.

[1] Anderson, Evertson, & Emmer, 1979

[2] BTES Phase III-B (Fisher, et al., 1978)

[3] Evertson, 1975

[4] Kounin, 1977

Instructional Interactions

- Pre-plan activities so that morning activities are attention-getting and so that students can participate right away.[1]
- Require participation by all students in all group activities.[1]
- Devote more instructional time to group lessons. Engagement rates are higher in group lessons than in seatwork. However, when the time spent in seatwork is spent on academic interaction rather than organization or waiting for others, engagement rates are equally high during both group work and seatwork. In addition, engagement rates are higher when students receive more contact with the teacher during seatwork. Engagement rates are particularly low when students spend over two-thirds of their time on seatwork, receiving little attention from the teacher.[3]

- Increase teacher-student academic interactions. The more often a student is involved in academic interaction with the teacher, the higher his/her engagement rate.[3,4]
- Ask students more questions, written or oral, in order to observe and assess academic performance.[3,4]

Instructional Conditions

- Provide for prerequisite learning needed for a particular task for each student by reviewing prerequisite skills and concepts, by altering the learning task, or by furnishing remedial instruction.[2]

- In order to provide appropriate instruction for each student, implement Bloom's "mastery learning." Mastery learning is based on the idea that most students can achieve equally high levels of learning in a school subject if each one has the time and help he/she needs, when it is needed. Specific strategies used include providing quality instruction in what is to be learned as well as clear directions as to what the student is supposed to do in the learning process, reinforcing learning, ensuring the active involvement of students in learning, and providing feedback and "correctives" to students. Correctives may include reteaching concepts or skills in a new way or providing additional time and practice.[2]

[1] Anderson, Evertson, & Emmer, 1979

[2] Bloom, 1976

[3] BTES Phase III-B (Fisher, et al.,

[4] Good & Grouws, 1979

Instructional Conditions (continued)

- Learn about and apply behavioral principles--reinforcement, transfer, retention.[3]

- For math lessons, plan explanations of concepts and procedures. This explanation may take the form of a lecture. Focus on meaning and on promoting understanding by using lively explanations, demonstrations, process explanations, and illustrations.[2,4]

Monitoring

- Schedule regular times each day to review work from preceding time periods (such as morning seatwork or reading group time) in order to determine if anyone is having difficulty completing the work. Offer help as soon as possible.[1]

- Move around the room regularly and systematically during seatwork periods, checking each student frequently.[1]

- Be consistent in holding students accountable for academic work in the time allotted. Assign and check homework.[1,2,4]

- Check students' work by looking at papers or listening to oral responses. Student answers should be visible to the teacher. Nonperformers should be brought into the recitation. The teacher should circulate, checking performance during recitation. Unison responses with the teacher selectively listening for individual answers may be used.[2,5,6]

- During recitation, keep students "on their toes." Create suspense, pick students randomly, use mass unison occasionally, warn students who aren't participating and use high attention value props or issues when possible. Try not to become immersed in one student, pick the reciter before asking the question, or call on students in a predetermined sequence.[5]

[1]Anderson, Evertson, & Emmer, 1979

[2]BTES Phase III-B (Fisher, et al., 1978)

[3]Cantrell, et al., 1977

[4]Good & Grouws, 1979

[5]Kounin, 1977

[6]McKenzie, 1979

Watching other people or unassigned activities

- Arrange desks and chairs so students are facing or can easily face the point in the room where they must most often focus.[1]

- Change the furniture in the classroom around. For example, use desks rather than tables; do not place active or noisy areas such as science or music next to quieter ones such as writing or reading.[2]

[1]Anderson, Evertson, & Emmer, 1979

[2]Berliner, 1978

Generated Strategies--Unoccupied/Observing

ENGAGEMENT RATE STRATEGIES--OUT OF ROOM

Although no research studies have focused on this unengaged category, the following commonsense strategies are suggested

- Reduce the number and length of trips to the nurse, office, etc. For example, schedule nurse or office trips during subjects other than reading/language arts or math, if possible.

- Reduce the number and length of trips to the bathroom. For example, allow only one student of each sex in the bathroom at a time. You might wish to develop a card system to monitor this in which there are two cards by the door (girls and boys) that can be turned to one side when someone goes to the bathroom and flipped back when he/she returns.

Generated Strategies--Out of Room

THINGS TO THINK ABOUT IN MAKING A SELECTION

Considerations in making a strategy selection are listed in the form of questions below; you may wish to add some additional questions in the blank spaces. Answer each question for each potential strategy and use these answers to help you select a strategy. In general, the answers to questions 1, 3, 4, and 7 should probably be "yes" for the selected strategy. Write the selected strategy at the bottom of the page.

1. Is the strategy logically related to your goal?
2. Are additional materials or equipment needed?
3. Does the strategy fit your teaching style?
4. Is the change appropriate for you and your students?
5. Would others be affected?
6. Is this change the simplest one you can make?
7. Does the amount of data available warrant the change?
8.

Selected Strategy _____

_____

_____

_____

NOTES

D.3. Engagement Rate Strategies

The research findings for engagement rate (as well as those for allocated time) are derived from many sources. The specific studies cited in 3119 are described in the following paragraphs.

Anderson, L. M., Evertson, C. M., Emmer, E. T. Dimensions in classroom management derived from recent research. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979.

This year-long study of 28 third-grade teachers in low-socioeconomic status schools yielded extensive and rich narrative data describing their management practices from the beginning of the year. The seven most effective and seven least effective teachers (in terms of ratings of management practices) were compared to determine what dimensions of management discriminated them. Teacher behaviors are examined for the information that was conveyed to students about the purposes of cooperative behavior and how to behave in the classroom. The teachers' skills at diagnosing students' needs for information and immediate concerns are also discussed.

Arlin, M. Teacher transitions can disrupt time flow in classrooms. American Educational Research Journal, 1979, 16(1), 42-56.

Disruptive pupil behavior (unengaged behavior) was analyzed in the classrooms of 50 student teachers in mixed socioeconomic level classrooms in grades one through nine. Transitions were found to disrupt time flow. Disruptive pupil behaviors increased during instructional transitions. Procedures for structuring transitions to increase engaged time and to maintain smoothness and momentum are described.

Berliner, D. C. Changing academic learning time: Clinical interventions. In C. Fisher et al. (Ed.) Selected findings from Phase III-B, BTES Beginning Teacher Evaluation Study Supplement. San Francisco, Calif.: Far West Laboratory, 1978.

This paper describes experimental studies involving clinical interventions to help teachers increase academic learning time. Strategies found to be effective in changing academic learning time are described. Four second-grade classrooms of mixed socioeconomic levels were involved.

Bloom, B. S. Human characteristics and school learning. New York: McGraw-Hill, 1976.

This book extends and amplifies the tenets of mastery learning. The basic premise is that "most students become very similar with regard to learning ability, rate of learning, and motivation for further learning-when provided with favorable learning conditions." These favorable learning conditions are enumerated and described.

Callahan, L. G., & Glennon, V. J. Elementary school mathematics: A guide to current research. Washington, D.C.: Association for Supervision and Curriculum Development, 1975.

This book answers specific questions according to research findings. Areas considered include studies concerning the curriculum, studies concerning the child, studies concerning the learning environment, and studies concerned with teaching method.

Cantrell, R. P., Stenner, A. J., & Katzenmeyer, W. G. Teacher knowledge, attitudes, and classroom teaching correlates of student achievement. Journal of Educational Psychology, 1977, 69(2), 172-179.

This study of 40 first-grade teachers indicates that those teachers characterized by high knowledge of behavioral principles were more verbally positive with their classes and produced significantly higher residual achievement gain results for low-IQ and middle-IQ pupils than did those characterized by low knowledge of behavioral principles.

Evertson, C. M. Relationship of teacher praise and criticism to student outcomes (Report No. 75-7). Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1975.

Praise and criticism data were collected during a two-year correlational study of a selected sample of second and third grade teachers chosen for their consistency in producing student learning gains averaged over four years. These data were analyzed to determine the effect that praise, criticism, rewards, and punishment had on learning gains. Data on motivations, incentive, and punishment differed considerably by socio-economic status (SES). In low-SES schools, praise was regularly but weakly associated with learning gains on several measures, but it was relatively unimportant in high-SES classes. Criticism was negatively related in low-SES classes, but positively related in high-SES classes (although the number of both types of evaluative comments was low).

Symbolic rewards such as stars or smiling faces were moderately effective motivators in all classes, whereas verbal praise and the "reward" of classroom duties were not. In low-SES classes, neither symbolic rewards nor punishment were strongly related to student achievement gains. The most effective way of dealing with misbehavior in these classes was through an individual conference with the student. The main factor in the low-SES classes was the teacher's ability to motivate the student to become actively engaged in the learning process. Successful teachers in both kinds of schools communicated high expectations, but those in high-SES schools did so through a "critical demandingness," while those in low-SES schools did so through patience and encouragement.

Filby, N. N. How teachers produce "Academic Learning Time": Instructional variables related to student engagement. In C. Fisher et al. (Ed.) Selected findings from Phase III-B, BTES Beginning Teacher Evaluation Study Supplement. San Francisco, Calif.: Far West Laboratory, 1978.

This paper summarizes research findings relating classroom processes to student engagement rates. Specific strategies to increase engaged time are offered. The study involved six students from each of 25 second-grade and 21 fifth-grade classrooms of mixed socioeconomic levels.

Fisher, C. W., Filby, N. N., Marliave, R., Cahen, L. S., Dishaw, M. M., Moore, J. E., & Berliner, D. C. Teaching behaviors, academic learning time and student achievement: Final report of Phase III-B, Beginning Teacher Evaluation Study in Beginning Teacher Evaluation Study Technical Report Series (Tech. Rep. V-1). San Francisco, Calif.: Far West Laboratory, 1978.

This study reports relationships between classroom processes and student achievement in reading/language arts and mathematics. A central concept is Academic Learning Time, involving allocated time, engagement rate, and success rate. The study involved six students from each of 25 second-grade and 21 fifth-grade classrooms in the San Francisco Bay area. Results are stated for classes of mixed socioeconomic levels.

Good, T. L., & Grouws, D. A. Teaching effects: A process-product study in fourth-grade mathematics classrooms. Journal of Teacher Education, May-June 1977, 28(3), 49-54.

This article reports the results of a research program designed to identify teachers who were consistent (across different groups of students) and relatively effective or ineffective (in terms of student achievement on a standardized math achievement test). The research program initially

involved over 100 third and fourth grade teachers using the same texts in a stable, middle-class school district near a large urban city. Eighteen teachers were involved in the next stage of the study comparing relatively effective teachers to relatively ineffective ones on several classroom variables.

Good, T. L., & Grouws, D. A. The Missouri Mathematics Effectiveness Project: An experimental study in fourth-grade classrooms. Journal of Educational Psychology, 1979, 71(3), 355-362.

This study involving 40 fourth grade teachers (mostly from low socio-economic status areas) investigated the effectiveness of an experimental mathematics teaching program. The treatment program was primarily based on a large, naturalistic study of relatively effective math teachers. Students were tested before and after with a standardized test and a content test (posttest only), which had been designed to approximate the actual instructional content that students had covered during the treatment. Observational measures revealed that teachers generally implemented the treatment, and analyses of product data showed that students of treatment teachers generally outperformed those of control teachers on both the standardized and content tests.

Kounin, J. S. Discipline and group management in classrooms. Huntington, N.Y.: Robert E. Krieger Publishing Company, 1977.

This book reports the results of Kounin's research studies at several grade levels. The concepts of "withitness," "overlapping," "movement management," maintaining group focus, and programming to avoid satiation are discussed.

McKenzie, G. R. Effects of questions and test-like events on achievement and on-task behavior in a classroom concept learning presentation. The Journal of Educational Research, 1979, 72(6), 348-351.

Fifty-one third grade students from a suburban middle class area were randomly assigned to two groups. Both groups were exposed to a standard presentation on the concept of the lever and were asked the same questions. Experimental subjects were required to make overt responses to every question, while questions to control subjects were addressed to one person at a time. Those in the experimental group exhibited significantly fewer off-task behaviors than control subjects.

Medley, D. M. Teacher competence and teacher effectiveness: A review of process-product research. Washington, D.C.: American Association of Colleges for Teacher Education, 1978.

This study presents the findings of a synthesis of results of 14 process-product studies. Differences between effective and ineffective teachers are presented in relation to such classroom variables as "maintenance of learning environment," "use of pupil time," and "quality of instruction."

E. Preparation of an implementation and monitoring plan (60-80 minutes)

Rationale. Before making any plans, participants should clearly describe their selected strategy, showing both what is to be done and how the strategy is related to student engaged time. Next, participants may wish to construct a plan for preparing or putting the modification into effect. The complexity of individual strategies will determine the amount and sophistication necessary. Minimally, participants should list questions used to determine whether the strategy has been implemented and the criteria that must be met for the teacher to be satisfied that the modification has reached the intended level. Finally, a monitoring plan can be prepared to help assure participants that their intended strategy is in place--prior to another round of data collection on student engaged time.

Materials	Strategy
★3T11--Strategy Description ★3H12--Describing Your Strategy ★3H13--Peter Demetrios's (a-d) Plans for Increasing Allocated Time	Describe the necessary parts of a strategy description and explain why each is necessary. Discuss the example and distribute others if desired (3H17, 3H18, 3H19). Have teachers complete 3H12.
3H14--Implementation Planning Guide 3T15--Considerations in Planning	Explain the purpose and use of the Implementation Planning Guide. Discuss the example (3H13b) before having participants complete their own.
★3H16--Monitoring Plan 3H17--Maria Malenkoi's (a-c) Plans for Increasing Engagement Rate--Management/Transition 3H18--Tad Tallchief's Plans (a-c) for Increasing Engagement Rate--Unoccupied/Observing 3H19--Juanita Mahler's Plans (a-b) for Increasing Engagement Rate--Unoccupied/Observing	Introduce the purpose and format of a monitoring plan by reviewing Peter Demetrios's monitoring plan (3H13c). Participants may find it helpful to refer to the other examples in 3H17, 3H18, or 3H19 to complete their own plans on 3H16. Review with participants the activities to be completed before the next session.

Preparation of an implementation and monitoring plan--Continued

Alternative Strategies

1. Participants whose modifications do not require some organized planning, involve the cooperation of others, or include a series of preparatory steps over time will not need to complete the Implementation Planning Guide (3H14). These participants with less complex strategies should skip Topic 2, moving directly to describing the implementation in action (Topic 3).
2. Participants involved in a schoolwide or highly complex strategy may wish to use the implementation forms found in Appendix D.
3. Given examples (3H13, 3H17, 3H18, 3H19) of strategy descriptions, Implementation Planning Guides, implementation descriptions, and monitoring plans, participants can complete their own strategy descriptions (3H12), Implementation Planning Guides (3H14), and monitoring plans (3H16) independently after the session.

1. Description of strategy (15-20 minutes)

★a. Parts of a strategy description (3T11, 3H12)

(1) Statement of strategy

(a) Elements included

(i) What actions are to be taken

(ii) How these actions are to be done

(b) Rationale

(i) Difficult to implement strategy if not clearly stated

(ii) Difficult to evaluate strategy's effectiveness if not clearly stated

(2) Relationship to student engaged time

(a) Strategy related to either allocated time or engagement rate

(b) Engagement rate strategies related to unengaged categories

(i) Management/Transition

(ii) Socializing

(iii) Discipline

(iv) Unoccupied/Observing

(v) Out of Room

(c) Rationale--in order to change student engaged time, some aspect of it must be changed

b. Examples

★(1) Peter Demetrios--fifth grade math (3H13a)

(a) Increase time spent on math by decreasing time spent on art and music and by combining math instruction with science and/or social studies lessons

(b) Allocated time

(2) Others (3H17a, 3H18a, 3H19a)

★c. Own data (3H12)

(1) Statement of strategy

(2) Relationship to student engaged time

2. Implementation Planning Guide (3H14) (15-20 minutes)

a. Planning/organizing device

(1) Record of ideas/suggestions developed at meeting

(2) Does not need to be complex--should be useful

b. Categories

(1) Decisions (steps, plans) that need to be taken or made (3T15)

(a) Arrangements that should be attended to

(i) Do I need to confer with other teachers about how their schedules will be affected?

(ii) Whose approval will I need?

(iii) Is any special training needed?

(iv) Do students need to be oriented to new procedures, materials, or equipment?

(v) Is there any special equipment needed? If so, what?

(vi) How much money will it cost to implement the strategy?

(b) Major steps in implementation

(2) Materials/resources needed and possible sources

(a) Human and material resources

(b) Sources--where do I start looking?

(i) Other teachers

(ii) Resource Guide

(3) Timeline

(a) Target dates

(b) Logical order

(c) Review first category--steps, plans, etc. as a check

c. Example--Peter Demetrios (3H13b)

(1) Steps

(2) Resources and sources

(3) Timeline for action

d. Another example (3H17b)

★e. Own Implementation Planning Guide (3H14)

3. Developing a monitoring plan (3H17) (15-20 minutes)

a. Format of a monitoring plan

(1) Method of watching (monitoring) strategy to see if it is in place

(2) Develop from implementation description

(a) Keep simple

(b) Include:

(i) What monitoring information will be collected

(ii) How it will be collected

(iii) How you will know strategy is in place

(iv) Who will collect this information

(v) When information will be collected--refer back to timeline on 3H14

b. Example--Peter Demetrios (3H13c)

(1) What monitoring information will be collected?

(a) Crucial elements of strategy

(b) Peter identified allocated time as crucial element --is plan to devote more time to math being followed

(c) Therefore, allocated time data will be collected

(2) How will this information be collected?

(a) May be log or checklist

(b) Dependent on type of information to be kept

(c) Peter decided to keep daily log (?H13d)

(3) How will Peter know strategy is in place?

(a) Used to have 30 minutes of math in the morning

(b) Will now accept a minimum of 25+5+15 or approximately 45 minutes

(4) Who will collect this information?

(a) May be teacher, student, other participant

(b) Again, dependent on type of information to be collected

(c) Peter decided to keep own log

(5) When will information be collected?

(a) Teacher judgment--when he/she believes strategy is in place

(b) Collection of data, monitoring is a check

(c) Peter's responses (3H13c)

(i) Strategy will be implemented January 8

(ii) He will begin monitoring on January 8

(iii) If monitoring shows strategy is in place each day of last two weeks, he will schedule a second round of observations on student engaged time

c. Other examples (3H17c, 3H18b, 3H19b)

d. Own monitoring plan (3H16)

5. Next steps

a. Activities to be completed before next meeting

(1) Implement strategy in own classroom

(2) Monitor strategy

b. Activities at next meeting

(1) Discussion of strategy implementation and deviations from plans

(2) Scheduling of next round of observations on student engaged time after monitoring shows strategy is in place

MATERIALS

9/3/80

STRATEGY DESCRIPTION

STATEMENT OF STRATEGY

What
How

RELATIONSHIP TO STUDENT ENGAGED TIME

Allocated Time
Engagement Rate
- Management/Transition
- Socializing
- Discipline
- Unoccupied/Observing
- Out of Room

9/3/80

3H12

DESCRIBING YOUR STRATEGY

1. Describe your modification strategy. (Include <u>what</u> and <u>how</u>. Ask yourself if you would be able to observe the strategy if it were actually implemented.)

2. How is your strategy related to student engaged time? (Allocated time or engagement rate? If engagement rate, which category--management/ transition, socializing, discipline, unoccupied/observing, or out of room?)

PETER DEMETRIOS'S PLANS FOR INCREASING ALLOCATED TIME

Peter Demetrios, a fifth grade teacher at New Delpen Elementary School, wants to increase student engaged time in math. His current engagement rate of 85% is all right, but he'd like to change his allocated time from 30 minutes to 60 minutes each day. His present schedule includes a 30-minute math lesson each morning followed by reading/language arts for two hours. After lunch and recess the class works on art (Monday), music (Tuesday), social studies or science (Wednesday-Friday) for one hour and then has special subjects for 45 minutes (physical education, music, or art). Peter ends the day with sustained silent reading for 30 minutes. Peter needs to decide how to get the extra 30 minutes each day for math and how to use that extra time. His review of research on teaching math indicates that frequent review of computation and regular instruction in problem solving are associated with higher student achievement, so he decides to add drill and problem-solving activities.

DESCRIBE YOUR STRATEGY

1. Describe your modification strategy.

   In addition to the present 30 minutes spent each morning on math, four days each week spend 10 minutes each afternoon on review of facts or computational algorithms and an additional 20 minutes each afternoon on problem solving. The additional 30 minutes for math will be taken from the supplementary art activity on Monday and the supplementary music activity on Tuesday, since students meet with the art teacher and the music teacher. The additional math time on Wednesdays and Thursdays will be accomplished by shortening recess by 10 minutes for math review and by combining math with social studies and/or science each day by doing problem-solving activities related to those subject areas. I will be unable to increase the math time on Fridays because of the school schedule for special classes.

2. How is your strategy related to student engaged time?

   Increasing allocated time should increase student engaged time--if engagement rate remains the same.

PETER DEMETRIOS'S IMPLEMENTATION PLANNING GUIDE

Steps/Plans/Decisions That Need to be Made

Decide when during the afternoon to schedule problem-solving and computational drill/review sessions

Confer with principal about new schedule

Introduce routine to students

Materials/Resources Needed and Possible Sources

Source of problems for problem-solving sessions--district math coordinator

Problem-solving teaching strategies--Teachers' college library; Arithmetic Teacher articles; inservice course

Different activities (games, individual task cards, manipulatives, etc.) for drill/review sessions--school storeroom; get ideas from Tad (Title I teacher); the regional resource library; Teacher magazine and Learning magazine

Timeline of Events

12/1	*Review schedule and revise--talk with principal sometime this week to review schedule and get storeroom key*
12/7	*Leave a note in Tad's box; call district math coordinator*
12/10	*Stop at the regional instructional materials center to see what can be borrowed*
12/14	*Visit Atlantic Teachers' College Library, if necessary*
12/14-1/2	*Plan first week of activities in problem-solving and computational review/drill*
1/8	*Begin new schedule--discuss changes with students*

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3H13c

PETER DEMETRIOS

MONITORING PLAN

WHAT?

What monitoring information will be collected?

Length of morning math lesson (at least 25 minutes); length of afternoon math practice (at least 5 minutes); length of afternoon problem-solving session (at least 15 minutes).

HOW?

How will this information be collected? With what form or instrument?

Daily monitoring log with: beginning and ending times for math; beginning and ending times for both practice and problem solving. (See back)

How will you know the strategy is in place?

The morning math lesson must be at least 25 minutes long.
The practice/review session must be at least 5 minutes long each afternoon.
The problem-solving session must be at least 15 minutes long each afternoon.

WHO?

Who will collect this information? *Me*

WHEN?

When will the strategy be implemented in the classroom? *1/8*

When is monitoring to begin? *1/8*

When, or under what conditions, will the next round of observations on student engaged time be scheduled?

If strategy is in place four out of five days in each of last two weeks of January, I will schedule second round of data collection during first week of February.

Peter's Monitoring Log

Date _____

SUBJECT	TIME BEGAN	TIME ENDED
Art		
Citizenship		
Grammar		
Math - drill and practice		
Math - lesson		
Math - problem solving		
Music		
Reading		
Science		
Spelling		
SSR		
Writing		
Social Studies		

3H14

IMPLEMENTATION PLANNING GUIDE

Steps/Plans/Decisions That Need to be Made

Materials/Resources Needed and Possible Sources

Timeline of Events

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CONSIDERATIONS IN PLANNING

Other teachers' schedules

Approvals

Training

Orientation of students

Special equipment

Cost

9/3/80

MONITORING PLAN

WHAT?

What monitoring information will be collected?

HOW?

How will this information be collected? With what form or instrument?

How will you know the strategy is in place?

WHO?

Who will collect this information?

WHEN?

When will the strategy be implemented in the classroom?

When is monitoring to begin?

When, or under what conditions, will the next round of observations on student engaged time be scheduled?

MARIA MALENKOI'S PLANS FOR INCREASING
ENGAGEMENT RATE--MANAGEMENT/TRANSITION

Maria Malenkoi is a fifth grade teacher at the fictional New Delpen Elementary School. She has decided to change student engaged time by trying to increase her students' engagement rate from 70% to 80%. Many of her students were coded in the management/transition category. She thinks this was because they were often waiting for the next activity to begin and has selected strategies relating to these behaviors.

DESCRIBE YOUR STRATEGY

1. Describe your modification strategy.

   Provide daily reading/language arts assignments at the beginning of each period.
   Give students weekly assignments in reading/language arts--activity cards to be completed when daily work is done.

2. How is your strategy related to student engaged time?

   My students are spending too much time waiting for assignments at the beginning of the period and after finishing their daily work. If this management/transition time can be reduced, then more time will be available for academic work. Research findings suggest that this management/transition time can be reduced by providing assignments at the beginning of the class period and after daily work is finished, thereby increasing engagement rates and thus student engaged time.

MARIA MALENKOI'S IMPLEMENTATION PLANNING GUIDE

Steps/Plans/Decisions That Need to be Made

Format and general method of selecting content for weekly assignments need to be established

Decide on how individualized to make weekly assignments

Plan introduction of weekly assignments to class

Materials/Resources Needed and Possible Sources

See Bill MacKenzie (reading specialist) for ideas on weekly assignments

Also try checking resource center items on student contracts

Timeline of Events

October 20	*See Bill MacKenzie*
October 29	*Stop at resource center*
November 1	*Establish format of first set of weekly assignments*
November 4	*Introduce weekly assignments to class*
November 6	*Remind students of weekly assignment procedures*

MARIA MALENKOI

MONITORING PLAN

WHAT?

What monitoring information will be collected?

Whether or not an assignment was made during the first minute of reading/language arts class and whether or not weekly activity assignments were given.

HOW?

How will this information be collected? With what form or instrument?

Place a green check in lesson plan book when assignment is given during first minute of class; also note use of weekly assignment cards in lesson plan book.

How will you know the strategy is in place?

A reading/language arts assignment will be made within the first minute of each period for at least 7 classes in each two-week period.

Students will have weekly activity card assignments to complete when daily work in reading/language arts is done.

WHO?

Who will collect this information? *Me*

WHEN?

When will the strategy be implemented in the classroom? *3/15*

When is monitoring to begin? *3/15*

When, or under what conditions, will the next round of observations on student engaged time be scheduled?

As soon as possible after 3/29, if strategy is in place.

TAD TALLCHIEF'S PLANS FOR INCREASING
ENGAGEMENT RATE--UNOCCUPIED/OBSERVING

Tad Tallchief is the Title I teacher at New Delpen Elementary. He wants to increase student engaged time in reading by changing his students' engagement rate from 80% to 85%. Many of his students were coded as unoccupied/observing. After talking with the people who observed in his classroom, Tad thinks that this is because the students were not involved in academic interactions and has selected strategies related to this area.

DESCRIBE YOUR STRATEGY

1. Describe your modification strategy.

   Increase the number of student-teacher interactions on academic matters by distributing my questions and comments fairly evenly among the students, providing clear feedback on the correctness of answers, and calling on specific students before asking questions.

2. How is your strategy related to student engaged time?

   Increasing the number of student-teacher interactions should decrease the number of unoccupied/observing students. Research indicates that frequent academic interactions with students are associated with increased engagement rates. Since engagement rate is directly related to student engaged time, an increase in engagement rate should increase student engaged time.

TAD TALLCHIEF
MONITORING PLAN

WHAT?

What monitoring information will be collected?

Increased number of interactions, clear feedback, even distribution of questions and comments, and preidentification of respondents to teacher questions.

HOW?

How will this information be collected? With what form or instrument?

Audiotaping and monitoring tally sheet. *(See back)*

How will you know the strategy is in place?

In each reading group of eight students:

*no student should receive more than 24 percent of the questions/comments, nor less than 6 percent;**

*I will ask no more than five questions in which the respondent is not identified before asking the question;***

*I will judge my feedback to be clear in at least 75 percent of the instances (using the categories "clear," "somewhat clear," and "vague");***

*the number of student-teacher interactions must be at least 10 percent more, on the average, than they were during the first week in April.***

WHO?

Who will collect this information? *Me*

WHEN?

When will the strategy be implemented in the classroom? *3/2*

When is monitoring to begin? *3/7 continue to 3/17*

When, or under what conditions, will the next round of observations on student engaged time be scheduled?

Any time after 3/17, if strategy is in place on 8 of 10 days on which data were kept.

* Tad decided on these numbers since there are eight students in each reading group and 1/8 = 12½%. He thinks no one student should answer more than twice his share of the questions or less than half.

**Subjective judgments.

Tad Tallchief's Monitoring Form

Date _____

Total Class Reading ☐ Reading Group ☑

(*indicates member of taped reading group)

Student	Called upon
John	
Carlos	
*Anita	///
Penny	
*Andrew	///
Hosea	
Juan	
Maria	
*Claudia	///
Barbara	
Bill	
*Alan	~~////~~ /
Stephen	
Jerry	
*Karen	///
Louise	
Janet	
David	
*Jack	//
Deborah	
Judith	
*Bob	/
Valerie	
Linda	
*Karl	///

Asked question after identifying respondent:

~~////~~ //

Feedback to students

Clear: ~~////~~ ///

Somewhat clear: ////

Vague: //

JUANITA MAHLER'S PLANS FOR INCREASING
ENGAGEMENT RATES--UNOCCUPIED/OBSERVING

Juanita Mahler, a kindergarten teacher at New Delpen Elementary, wants to increase student engaged time in reading/language arts by increasing engagement rate. Many of her students were sitting alone or wandering about with no apparent purpose. Juanita thinks that the students need to be more involved in academic interactions and has chosen a strategy related to this area.

DESCRIBE YOUR STRATEGY

1. Describe your modification strategy.

   Increase total time in teacher-led instruction in reading/language arts from 15 to 30 minutes per day while decreasing total time in seatwork from 45 to 30 minutes.

2. How is your strategy related to student engaged time?

   Too many of my students are unoccupied/observing. Research indicates that it appears easier to sustain high engagement rates in teacher-led sessions than in seatwork sessions. An increase in the amount of teacher-led instruction should lead to an increased student engaged time.

JUANITA MAHLER

MONITORING PLAN

WHAT?

What monitoring information will be collected?

Length of teacher-led instruction in reading/language arts.

HOW?

How will this information be collected? With what form or instrument?

Daily log of teacher-led instruction in reading/language arts.

How will you know the strategy is in place?

Teacher-led instruction must be at least 12 minutes longer on the average than was the average length of teacher-led instruction during the first week of April.

WHO?

Who will collect this information? *Aide or parent-volunteer.*

WHEN?

When will the strategy be implemented in the classroom? *4/15*

When is monitoring to begin? *4/15*

When, or under what conditions, will the next round of observations on student engaged time be scheduled?

As soon as possible after 4/30, if strategy is in place at least ten school days.

APPENDIX D

SELECTED REFERENCES

Anderson, L. M., Evertson, C. M., Emmer, E. T. Dimensions in classroom management derived from recent research. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1979.

Arlin, M. Teacher transitions can disrupt time flow in classrooms. American Educational Research Journal, 1979, 16(1), 42-56.

Berliner, D. C. Changing academic learning time: Clinical interventions. In C. Fisher et al. (Eds.) Selected findings from Phase III-B, BTES Beginning Teacher Evaluation Study Supplement. San Francisco, Calif.: Far West Laboratory, 1978.

Bloom, B. S. Human characteristics and school learning. New York: McGraw-Hill, 1976.

Callahan, L. G., & Glennon, V. J. Elementary school mathematics: A guide to current research. Washington, D.C.: Association for Supervision and Curriculum Development, 1975.

Cantrell, R. P., Stenner, A. J., & Katzenmeyer, W. G. Teacher knowledge, attitudes, and classroom teaching correlates of student achievement. Journal of Educational Psychology, 1977, 69(2), 172-179.

Evertson, C. M. Relationship of teacher praise and criticism to student outcomes (Report No. 75-7). Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1975.

Filby, N. N. How teachers produce "Academic Learning Time": Instructional variables related to student engagement. In C. Fisher et al. (Eds.) Selected findings from Phase III-B, BTES Beginning Teacher Evaluation Study Supplement. San Francisco, Calif.: Far West Laboratory, 1978.

Fisher, C. W., Filby, N. N., Marliave, R., Cahen, L. S., Dishaw, M. M., Moore, J. E., & Berliner, D. C. Teaching behaviors, academic learning time and student achievement: Final report of Phase III-B, Beginning Teacher Evaluation Study in Beginning Teacher Evaluation Study Technical Report Series (Tech. Rep. V-1). San Francisco, Calif.: Far West Laboratory, 1978.

Good, T. L., & Grouws, D. A. Teaching effects: A process-product study in fourth-grade mathematics classrooms. Journal of Teacher Education, May-June 1977, 28(3), 49-54.

Good, T. L., & Grouws, D. A. The Missouri Mathematics Effectiveness Project: An experimental study in fourth-grade classrooms. Journal of Education Psychology, 1979, 71(3), 355-362.

Kounin, J. S. Discipline and group management in classrooms. Huntington, N.Y.: Robert E. Krieger Publishing Company, 1977.

McKenzie, G. R. Effects of questions and test-like events on achievement and on-task behavior in a classroom concept learning presentation. The Journal of Educational Research, 1979, 72(6), 348-351.

Medley, D. M. Teacher competence and teacher effectiveness: A review of process-product research. Washington, D.C.: American Association of Colleges for Teacher Education, 1977.

APPENDIX E

PLANNING FOR IMPLEMENTATION

For more extensive implementations, a teacher or group of teachers may wish to use the attached charts and questions to plan.

Each chart addresses a different aspect of implementation planning. The questions for each chart are only samples and will need adaptations, additions, and deletions.

The "date" column may be completed using an actual date, or by giving a time relative to some "major event" (e.g., two weeks after the last teacher-training session, or one week prior to the arrival of students).

At first, staff responsibilities need not be attached to a name, but the tasks should be identified (the group may wish to suggest persons or characteristics of a person).

After completing each chart separately, review to find factors that need to be, but were not, attended to on more than one chart. For example, a training entry may have budget implications.

It may then be helpful to establish a consensus on the timeline for implementation. If you wish, plot major events on the timeline on a board and check them against the school calendar.

As each section is reviewed, revise activities and dates. You may wish to rework the implementation plan chronologically as shown on pages 3.92-3.94.

IMPLEMENTATION PLANNING CHART

ACTIVITIES TO BE CONDUCTED	DATES	STAFF RESPONSIBILITY
A. Program Timing and Budgeting		

SAMPLE QUESTIONS FOR USE IN PREPARING AN IMPLEMENTATION PLANNING CHART

A. Program Timing and Budgeting

1. Do you plan to implement the program in all grades? With all teachers? With all students?
2. How much time is needed to prepare for proper implementation of the program?
3. Has a firm date been established for implementation of the program? Is this date compatible with the school calendar?
4. Do any changes need to be made in the current school program in order to implement this program?
5. What are some major problems that may force us to change the implementation date?
6. Can we delay implementation if we run into serious problems?
7. What are the major line items in the budget?
8. Has a budget been proposed and approved by the administration for the new program?
9. What steps have been taken to seek approval, if it has not already been granted?
10. Is the budget realistic?

IMPLEMENTATION PLANNING CHART

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ACTIVITIES TO BE CONDUCTED	DATES	STAFF RESPONSIBILITY
B. Staff Assignment, Orientation, and Training		

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B. Staff Assignment, Orientation, and Training

1. Have all the instructional staff been assigned and their roles defined? Support staff? Program Manager?

2. Do we need a training program for the instructional and/or support staff?

3. What kind of training program for each staff?

4. Who will do the training?

5. Has a training schedule been developed?

6. Where will the training take place?

7. Who should attend the training?

8. Does a list of questions to be addressed during training need to be compiled? Should this list be sent to the trainer prior to training?

9. Does a training evaluation form need to be developed?

10. Will the implementation of the program be monitored?

11. Should an orientation to the program be conducted for administrators and teachers in this school and in feeder or sender schools?

12. How can we obtain funds for the training activity?

13. Should parents be oriented to the program? What information should they be given?

14. When should each of these orientations occur?

IMPLEMENTATION PLANNING CHART

ACTIVITIES TO BE CONDUCTED	DATES	STAFF RESPONSIBILITY
C. Materials, Equipment, and Facilities		

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C. Materials, Equipment, and Facilities

1. What elements of the program are being used?
2. Do we have a list of all materials and equipment needed?
3. Is an inventory of existing materials needed?
4. Have the materials and equipment that are not currently available been ordered?
5. Who is responsible for inventorying materials as they are received?
6. Where will the materials be stored?
7. Does a filing system need to be set up?
8. Do any materials need to be developed?
9. Do any materials need to be reproduced?
10. Do check-out procedures need to be developed for the materials?
11. Do any record-keeping forms need to be developed?
12. Have arrangements been made for distribution of materials or installation of equipment?
13. Will any changes need to be made on the report cards?
14. Are the necessary facilities reserved and schedules prepared for their use?
15. Are any modifications needed to the existing facilities? How much time will such alterations take?

IMPLEMENTATION PLANNING CHART

ACTIVITIES TO BE CONDUCTED	DATES	STAFF RESPONSIBILITY
D. Student Scheduling and Instructional Procedures		

D. Student Scheduling and Instructional Procedures

1. How much time is needed each day to implement the program?

2. Is a school schedule needed for the program?

3. Do students need to be grouped within or between classes? By what means will the students be grouped?

4. Do students need to be tested at the beginning of the program?

5. Is a student orientation to the program needed? What topics should be covered?

6. Are the instructional procedures clearly defined in the program descriptions or the published manuals for the program?

7. Is the scope of each activity clearly defined?

8. Has a sequence for each activity been determined? Scheduled?

9. Will all students follow the same sequence?

10. Have major implementation milestone event dates been established? (e.g., first writing sample, report form #1, posttest, etc.)

SAMPLE IMPLEMENTATION PLANNING CHART

ACTIVITIES TO BE CONDUCTED	DATES	STAFF RESPONSIBILITY
1. Development of management system	7/1/78-6/30/79	Instructional improvement team (IIT), principal, reading coordinator "will coordinate all activities"
1.1 Develop reading skills list K-4		
a. Review current list, Ginn scope and sequence, Barbe list, etc.	7/17-24/78	
b. Compile Keystone skills list		
c. Submit Keystone skills list to total staff for input	7/30/78	
d. Write final list of reading skills for Keystone	8/20-30/78	
1.2 Develop criterion-referenced tests (CRTs)	7/1/78-6/30/79	IIT, principal, reading coordinator will plan and direct all activities
a. Inservice for IIT in CRT construction	7/30/78	Consultant provides inservice
b. Writing sample CRTs by IIT	8/6/78	IIT and reading coordinator

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SAMPLE IMPLEMENTATION PLANNING CHART

ACTIVITIES TO BE CONDUCTED	DATES	STAFF RESPONSIBILITY
c. Total staff inservice in writing CRTs	10/1/78	IIT and reading coordinator
d. Total staff writes CRTs for critical skills by grade level	10/15/78-3/1/79	Directed by IIT and reading coordinator
e. Field test CRTs	3/1/79-5/1/79	Reading coordinator
f. Revise CRTs	5/1-6/15/79	Reading coordinator and IIT
g. Print final version of CRTs for all grade levels	6/15-30/79	Reading coordinator and IIT
1.3 Develop student record system	9/1/78-6/30/79	IIT, principal, and reading coordinator plan and direct activities
a. Inservice IIT in development of student checklist	9/15-10/15/78	Reading coordinator
b. Relate checklist to CRTs	10/15-11/15/78	Reading coordinator and IIT
c. Develop student record forms	11/15/78-2/15/79	IIT and principal
d. Develop report cards	2/15-3/15/79	IIT and principal
e. Train total staff in use of student recordkeeping system, CRTs, and skills list	3/15-6/30/79	IIT, principal, and reading coordinator

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ACTIVITIES TO BE COMPLETED	DATES	STAFF RESPONSIBILITY
2. Installation of management system	7/1/79-6/30/80	IIT, reading coordinator, and principal
2.1 Staff training in use of: a. Skills list b. CRTs c. Student record-keeping system	8/6/79-8/10/79	Reading coordinator and IIT
2.2 Begin use of system in classrooms K-4 for 1979-80 school term a. Distribute skills list, CRTs, student record forms b. Monitor use of system	9/15/79	Reading coordinator and total staff
2.3 Assess effectiveness of system a. Teacher logs b. Interviews c. Evaluation forms	11/1/79-5/1/80	Reading coordinator, IIT, and principal
2.4 Revise system	6/15-30/80	Reading coordinator, IIT, and principal

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END

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